

Starter

1. Solve each equation below.

a. $2(w - 3) = 5(3w - 12)$

b. $5(2y - 3) - 4(y - 2) = 3(5y - 8)$

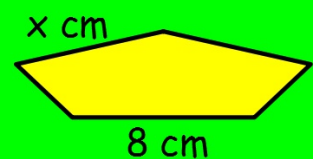
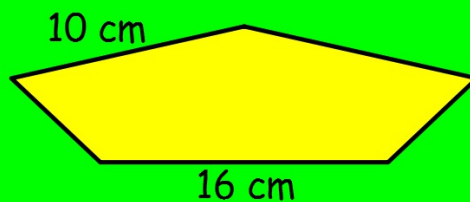
2. Find the area of a sector with an angle of 27° and a radius of 12 cm.

3. Find the **equation** of the line joining:

a. $(0, 1)$ to $(3, 7)$

b. $(2, -8)$ to $(0, -2)$

4. These shapes are mathematically similar.
Find x .



Starter

1. Solve each equation below.

a. $8(x - 2) = 2(2x + 9)$

b. $4(2p - 3) - 5(p - 4) = 5(2p + 6)$

2. Calculate the compound interest earned on £42,015 when it is invested for 8 years at an interest rate of 7.1% p.a.

Give your answer correct to 2 s.f.

3. Find the equation of the straight line joining

a. (0, -3) and (3, 6)

b. (-2, 5) and (0, 7)

4. These shapes are mathematically similar.

Find x .



Starter

1. Calculate

a. $\frac{1}{5} + \frac{2}{3}$

b. $1\frac{3}{4} - \frac{4}{5}$

c. $4\frac{1}{5} \times 2\frac{1}{7}$

2. Find the equation of the line joining the points

a. (0, 9) and (2, 13)

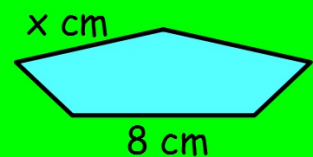
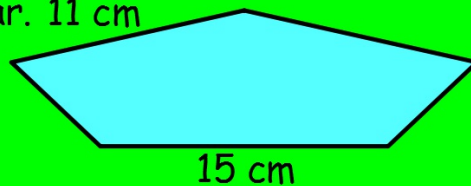
b. (-3, 4) and (2, -6)

3. Sanjana paid £45 for her S6 blazer.

When she left she sold it on for £21.

Express her loss as a percentage of the original price.

4. These shapes are
mathematically similar. 11 cm
Find x.



Starter

1. Expand the brackets and simplify

a. $4x(x - 2) + 3x(5 - x^2)$

b. $8(6f - 7) - 5(9 - 7f)$

2. Find the equation of the line joining:

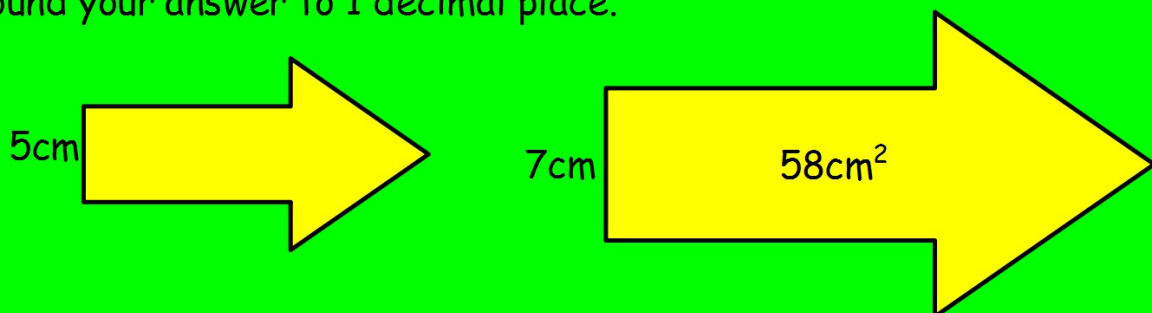
a. $(0, 5)$ and $(3, -8)$

b. $(2, -1)$ and $(0, 3)$

3. Find the area of a sector with an angle of 125° and a radius of 5.5 cm.

4. Find the area of the smaller shape shown below.

Round your answer to 1 decimal place.



Starter

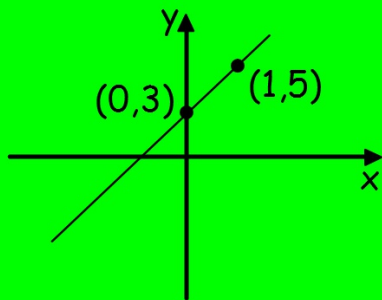
1. Solve each equation below.

a. $3(x - 2) = 2(2x - 7)$

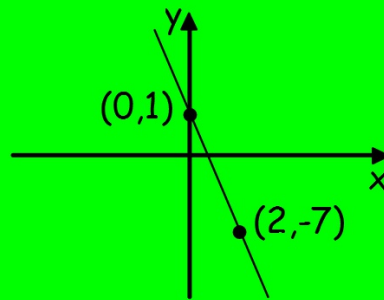
b. $4(2b - 1) - 3(b - 4) = 12$

2. Find the equation of each of these straight lines:

a.



b.



3. A bathroom floor tile measures 0.3 m by 0.4 m.
Its diagonal measures 0.5 m.
Is the tile rectangular?

4. Find the perimeter of a semi-circle with a radius of 18 cm.